

In the Claims

Please amend the claims as follows:

1. (canceled)
2. (canceled)
3. (canceled)
4. (canceled)
5. (currently amended) A method of making a rheology-modified

aqueous composition comprising admixing a material whose constituents conform to the proportions of the empirical formula



where M' represents at least one divalent metal cation selected from the group consisting of Mg, Ca, Mn, Fe, Co, Ni, Cu, and Zn and m is an amount of from greater than zero to about 8;

where M'' represents at least one trivalent metal cation selected from the group consisting of Al, Ga and Fe and n is an amount of from greater than zero to about 6;

where M' and M'' are selected from Groups IIA, VIIB, VIII, IB or IIB of the Periodic Table;

wherein ~~M' is selected from Mg, Ca, Mn, Fe, Co, Ni, Cu, and Zn, and M'' is selected from Al, Ga and Fe;~~

where A is an anion or negative-valence radical that is monovalent or polyvalent, and a is an amount of A of valence q, provided that if A is monovalent, a is from greater than zero to about 8, and if A is polyvalent, a is from greater than zero to about 4;

where B is a second anion or negative-valence radical that is monovalent or polyvalent, and where b is an amount of B of valence r and b is from zero to about 4;

provided (m+n) is greater than or equal to 1;

further provided qa+br cannot be greater than 2m+3n, and provided that qa cannot equal 2m+3n, and still further provided that (2m+3n+qa+br) is less than 3;

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where $x\text{H}_2\text{O}$ represents excess waters of hydration, with x being zero or more;
and

where the material is a calcined hydrotalcite or hydrotalcite-like compound, or mixture thereof, wherein the calcination is carried out in the presence of greater than about 1,000 ppm of sodium;

with at least a clay and water to form a rheology-modified aqueous composition.

6. (original) The method of Claim 5 wherein the calcination is carried out in the presence of greater than about 10,000 ppm of sodium.

7. (canceled)

8. (previously presented) The method of Claim 5 wherein the calcination is carried out by heating at a temperature from about 750°C to about 1500°C.

9. (previously presented) The method of Claim 8 wherein the temperature is from about 900°C to about 1000°C.

10. (previously presented) The method of Claim 5 wherein the clay is selected from bentonite, chlorite, polygorskite, saconite, vermiculite, halloysite, sepiolite, illite, kaolinite, attapulgite, montmorillonite, Fuller's earth, and mixtures thereof.

11. (previously presented) The method of Claim 5 further comprising adding an aluminum oxide, a nitrogen-containing compound, or both, wherein the amount of aluminum oxide is from about 5 to about 35 weight percent, and the amount of the nitrogen-containing compound is from about 20 to about 120 weight percent, based on the weight of the clay and the material whose constituents conform to the proportions of the empirical formula of Claim 5.

12. (original) The method of Claim 11 wherein the aluminum oxide is crystalline or amorphous.

13. (original) The method of Claim 11 wherein the nitrogen-containing compound is selected from urea, thiourea, propionamide, acetylamine, amine compounds, and mixtures thereof.

14. (previously presented) The method of Claim 5 wherein the weight/weight ratio of clay to the material or materials having constituents

conforming to the proportions of the empirical formula of Claim 5 is from about 99:1 to about 9:1.

15. (canceled)

16. (previously presented) The method of Claim 5 wherein $(2m+3n+qa+br)$ is less than 2.

17. (original) The method of Claim 16 wherein $(2m+3n+qa+br)$ is less than 1.

18. (currently amended) A dry rheology modification agent comprising a material conforming to the proportions of the empirical formula



where M' represents at least one divalent metal cation selected from the group consisting of Mg, Ca, Mn, Fe, Co, Ni, Cu, and Zn and m is an amount of from greater than zero to about 8;

where M'' represents at least one trivalent metal cation selected from the group consisting of Al, Ga and Fe and n is an amount of from greater than zero to about 6;

~~where M' and M'' are selected from Groups IIA, VIIB, VIII, IB or IIB of the Periodic Table;~~

~~wherein M' is selected from Mg, Ca, Mn, Fe, Co, Ni, Cu, and Zn, and M'' is selected from Al, Ga and Fe;~~

where A is an anion or negative-valence radical that is monovalent or polyvalent, and a is an amount of A of valence q , provided that if A is monovalent, a is from greater than zero to about 8, and if A is polyvalent, a is from greater than zero to about 4;

where B is a second anion or negative-valence radical that is monovalent or polyvalent, and where b is an amount of B of valence r and b is from zero to about 4;

provided $(m+n)$ is greater than or equal to 1;

further provided $qa+br$ cannot be greater than $2m+3n$, and provided that qa cannot equal $2m+3n$, and still further provided that $(2m+3n+qa+br)$ is less than 3;

where xH_2O represents excess waters of hydration, with x being zero or more;
and

wherein the material is a calcined hydrotalcite or calcined hydrotalcite-like compound, or mixture thereof, wherein the calcination is carried out in the presence of greater than about 1,000 ppm of sodium.

19. (canceled)

20. (previously presented) The agent of Claim 18 further comprising clay, an aluminum oxide, a nitrogen-containing compound, or a combination thereof.

21. (canceled)

22. (canceled)

23. (currently amended) The ~~composition~~ method of Claim 48 5 wherein the components are present in proportions and at a level of distribution such that the composition is an elastic solid which exhibits stress-dependent fluidity.

24.-48. (canceled)